SANTA CRUZ BIOTECHNOLOGY, INC.

PXK (K-19): sc-100107

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PXK (PX domain containing serine/threonine kinase), also known as FLJ20335, MONaKA or Modulator of Na^+/K^+-ATPase, is a 578 amino acid protein which localizes to the cell membrane, peripheral membrane, cytoplasm and occasionally associates with the plasma membrane. PKX is a member of the protein kinase superfamily and assists in regulation of synaptic transmission and electrical excitability by binding Na^+/K^+-ATPase subunits Na^+/K^+-ATPase $\beta 1$ and Na^+/K^+-ATPase $\beta 3$ in the brain. However, PXK may not be capable of kinase activity. Seven known PXK isoforms exist, almost all of which are expressed in the majority of tissues (excluding heart). Isoform 1, also known as the long isoform or v1, is highly expressed in spleen, testis, brain and skeletal muscle. While PXK consists of three domains (PX, protein kinase and WH2), the protein kinase domain is not expected to be catalytically active.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PXK (human) mapping to 3p14.3; Pxk (mouse) mapping to 14 A1.

SOURCE

PXK (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PXK of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100107 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PXK (K-19) is recommended for detection of PXK of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

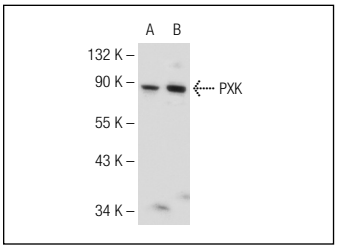
PXK (K-19) is also recommended for detection of PXK in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PXK siRNA (h): sc-77898, PXK siRNA (m): sc-152602, PXK shRNA Plasmid (h): sc-77898-SH, PXK shRNA Plasmid (m): sc-152602-SH, PXK shRNA (h) Lentiviral Particles: sc-77898-V and PXK shRNA (m) Lentiviral Particles: sc-152602-V.

Molecular Weight of PXK: 85 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, mouse brain extract: sc-2253 or LADMAC whole cell lysate.

DATA



PXK (K-19): sc-100107. Western blot analysis of PXK expression in LADMAC (**A**) and KNRK (**B**) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.